

Corrected Listing of Claims

1. (Previously presented) A micro-support cushion system comprising:
a generally planar base formed of a first polymeric material;
a plurality of spring structures arranged in a selected pattern overlying the base, so that each of the spring structures contacts the base;
each spring structure comprising a top compression layer having a contact surface area and a corresponding bottom compression layer having a contact surface area, both layers formed of compressible materials and, in each spring structure, the top and bottom compression layers substantially aligned with one another;
each spring structure bottom layer having a larger contact surface area than the corresponding top layer thereby providing a higher compression rate than the corresponding top layer; and
the top and bottom compression layers being aligned so that, in use, once the top layer is compressed, additional force applied to the top layer is substantially transferred through the top layer to the corresponding bottom layer.
2. (Original) A micro-support cushion system according to claim 1 including a plurality of connections interconnecting the spring structures' respective top layers so as to maintain the spring structures positioned overlying the base substantially in accordance with the selected pattern.
3. (Original) A micro-support cushion system according to claim 1 wherein the selected pattern locates the spring structures generally spaced apart from one another by about 0.25 inch.
4. (Currently amended) A micro-support cushion system comprising:
a base sheet and a top sheet both formed of compressible materials;
a plurality of layered spring structures integrally formed in the base sheet; and
a plurality of compression structures integrally formed in the top sheet, ~~at least one of the compression structures aligned over a corresponding one of the spring structures; and wherein at least one~~ the compression structures ~~[[are]]~~ is layered to provide gradual changes in compression rate as increasing force is applied pressing the base and top sheets together ~~and at least one of the layered compression structures is aligned over a corresponding one of the layered spring structures.~~

5. (Original) A micro-support cushion system according to claim 4 wherein each compression structure comprises a plurality of concentric cylindrical layers.

6. (Original) A micro-support cushion system according to claim 4 wherein each compression structure comprises a plurality of frustum shaped layers.

7. (Currently amended) A layered spring assembly for use in a cushion support system, the spring assembly comprising:

a first base having a layered spring structure formed thereon, the layered spring structure formed from a compressible material;

a second base having a compression structure formed thereon, the compression structure formed from a compressible material;

~~a layered spring structure and a corresponding compression structure, each structure formed of a compressible material, and the structures each structure aligned with one another for transfer of applied force through one structure to the other[.]]; and~~

wherein the spring structure is layered with progressively larger contact areas for contacting the corresponding compression structure.

8. (Original) A layered spring assembly according to claim 7 wherein the compression structure is substantially flat.

9. (Original) A layered spring assembly according to claim 7 wherein the compression structure is layered.

10. (Original) A layered spring assembly according to claim 7 wherein:
the spring structure includes an integrally-formed central plunger region; and
the compression structure includes an integrally-formed recess, sized and located to receive the plunger region in nesting engagement when the two said structures are pressed together;

the said plunger region having a length greater than a corresponding height of the recess, so that, in use, the plunger region is compressed when fully engaged in the recess.

11. (Previously presented) A micro-support cushion system according to claim 1 wherein each top compression layer and bottom compression layer have a height relative to the base and the height of the top compression layer is greater than the height of the bottom compression layer relative to the base.

12. (Previously presented) A micro-support cushion system according to claim 4 wherein each of the layered spring structures is solid.

13. (Previously presented) A micro-support cushion system according to claim 4 wherein each of the compression structures is solid.

14. (Previously presented) A layered spring assembly according to claim 7 wherein the layered spring structure is solid.

15. (Previously presented) A layered spring assembly according to claim 7 wherein the compression structure is solid.